

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of making a glass panel that is partially printed with a plurality of layers in the form of a print pattern which subdivides the panel into a plurality of discrete printed areas and/or a plurality of discrete unprinted areas, said layers being in substantially exact registration, said method comprising:

(i) applying a plurality of layers to a sheet of glass, wherein said applying comprises printing one of said layers comprising a ceramic ink comprising glass frit in the form of said print pattern, and printing another of said layers both within and outside said print pattern, wherein the another of said layers comprises first and second parts, wherein the first part is disposed within the print pattern, wherein the second part is disposed outside the print pattern, wherein the first and second parts each comprise pigment, wherein said printing comprises (a) printing the one of said layers in the form of said print pattern onto the sheet of glass such that said sheet of glass is devoid of said one of said layers outside said print pattern, or (b) printing the one of said layers in the form of said print pattern onto a decal carrier material and transferring said one of said layers in the form of a decal from said decal carrier material onto said sheet of glass such that said sheet of glass is devoid of said one of said layers outside said print pattern,

(ii) subjecting said sheet of glass and said plurality of layers to a heat treatment process wherein said glass frit in said one of said layers melts and fuses with said sheet of glass and binds at least a portion of the pigment of the first part of the another of said layers within said print pattern, and

(iii) removing the at least a portion of the pigment of the second parts of said another of said layers outside said print pattern by (a) burning off during said heat treatment process, and/or (b) vaporizing during said heat treatment process, and/or (c) a subsequent finishing process.

2. (Previously Presented) A method as claimed in claim 1, wherein, after (iii), a plurality of said plurality of layers are superimposed and are coterminous at a common length of

boundary with a boundary between contiguous printed areas and unprinted areas of the print pattern.

3. (Previously Presented) A method as claimed in claim 1, wherein, after (iii), a plurality of said plurality of layers are single layers of different color and have boundaries to said print pattern which are spaced apart.

4. (Previously Presented) A method as claimed in claim 1, wherein said print pattern is defined by said one of said layers comprising a clear ceramic ink comprising said glass frit and resin matrix material.

5. (Previously Presented) A method as claimed in claim 1, wherein said one of said layers comprises a resin matrix and wherein the method further comprises applying a preliminary heat treatment to said one of said layers before the application of said another of said layers and before said subjecting of said sheet of glass and said plurality of layers to said heat treatment process, wherein said resin matrix is substantially removed from said one of said layers by said preliminary heat treatment.

6. (Previously Presented) A method as claimed in claim 1, wherein said glass frit in molten, liquid form migrates into said another of said layers.

7. (Previously Presented) A method as claimed in claim 11, wherein said matrix comprises resin, and wherein said resin melts during said heat treatment process to form liquid resin.

8. (Original) A method as claimed in claim 7, wherein said liquid resin carries particles of said glass frit from said one of said layers into said another of said layers during said heat treatment process.

9. (Cancelled)

10. (Previously Presented) A method as claimed in claim 9, wherein:
said at least the portion of said another of said layers comprises said pigment,
the heat treatment process binds said pigment to said sheet of glass within said print
pattern, and

said removing the parts of said another of said layers outside said print pattern removes
said pigment outside said print pattern by said subsequent finishing process.

11. (Previously Presented) A method as claimed in claim 1, where said another
of said layers comprises an ink comprising a binding matrix.

12. (Previously Presented) A method as claimed in claim 11, wherein said
another of said layers does not comprise glass frit.

13. (Currently Amended) A method as claimed in claim 11, wherein the heat
treatment process burns off said matrix, leaving said pigment of the second part of said another
of said layers on said sheet of glass outside said print pattern prior to said removing of the at
least a portion of the pigment of parts of said another of said layers outside said print pattern.

14. (Previously Presented) A method as claimed in claim 1, wherein said print
pattern is defined by a white ceramic ink comprising said glass frit and resin matrix material.

15. (Previously Presented) A method as claimed in claim 1, wherein said print pattern is defined by a black ceramic ink comprising said glass frit and resin matrix material.

16. (Previously Presented) A method as claimed in claim 1, wherein applying said plurality of layers to said sheet of glass comprises printing said plurality of layers onto said sheet of glass.

17. (Previously Presented) A method as claimed in claim 1, wherein applying said plurality of layers to said sheet of glass comprises transferring said plurality of layers in the form of the decal from the decal carrier material to the sheet of glass.

18. (Previously Presented) A method as claimed in claim 1, further comprising, after (iii), subjecting said sheet of glass to a glass toughening process comprising a further heat treatment process and subsequent cooling by cold air quenching.

19. (Previously Presented) A method as claimed in claim 1, wherein (iii) comprises removing the parts of said another of said layers outside said print pattern by the subsequent finishing process, and wherein said subsequent finishing process comprises applying a vacuum, water jetting, or air jetting.

20. (Previously Presented) A method as claimed in claim 9, wherein said pigment settles into molten glass frit.

21. (Previously Presented) A method as claimed in claim 1, wherein said printing of said one of said layers comprises printing said one of said layers onto one surface of the sheet of glass.

22. (Previously Presented) A method as claimed in claim 1, wherein said printing of said one of said layers comprises printing said one of said layers onto a surface of said another of said layers remote from said sheet of glass.

23. (Previously Presented) A method as claimed in claim 1, wherein said printing of said one of said layers comprises printing said one of said layers intermediate said another of said layers and a further layer of said plurality of layers.

24. (Previously Presented) A method as claimed in claim 1, wherein (iii) comprises:

burning off and vaporizing the parts of said another of said layers outside said print pattern during said heat treatment process;

burning off the parts of said another of said layers outside said print pattern during said heat treatment process, and removing the parts of said another of said layers outside said print pattern by a subsequent finishing process;

vaporizing the parts of said another of said layers outside said print pattern during said heat treatment process, and removing the parts of said another of said layers outside said print pattern by a subsequent finishing process; or

burning off and vaporizing the parts of said another of said layers outside said print pattern during said heat treatment process, and removing the parts of said another of said layers outside said print pattern by a subsequent finishing process.

25. (Previously Presented) A method as claimed in claim 1, wherein said at least the portion of said another of said layers remains within said print pattern after said (a) burning, (b) vaporizing, or (c) removing.

26. (Previously Presented) A method as claimed in claim 25, wherein the at least the portion of said another of said layers comprises ink that remains within said print pattern after said (a) burning, (b) vaporizing, or (c) removing.

27. (Previously Presented) A method as claimed in claim 1, wherein said applying of the plurality of layers to the sheet of glass comprises applying said another of said layers both within and outside of said print pattern.

28. (Currently Amended) A method of making a glass panel that is partially printed with a plurality of layers in the form of a print pattern which subdivides the panel into a plurality of discrete printed areas and/or a plurality of discrete unprinted areas, said layers being in substantially exact registration, said method comprising:

(i) applying a plurality of layers to a sheet of glass, wherein said applying comprises printing one of said layers comprising a ceramic ink comprising glass frit in the form of said print pattern,

wherein said printing comprises (a) printing the one of said layers in the form of said print pattern onto the sheet of glass, or (b) printing the one of said layers in the form of said print pattern onto a decal carrier material and transferring said one of said layers in the form of a decal from said decal carrier material onto said sheet of glass, and

wherein said applying comprises applying another of said layers both within and outside said print pattern, wherein the another of said layers comprises first and second parts, wherein the first part is disposed within the print pattern, wherein the second part is disposed outside the print pattern, wherein the first and second parts each comprise pigment; and

(ii) subjecting said sheet of glass and said plurality of layers to a heat treatment process wherein that melts said glass frit, melts and fuses said glass frit with said sheet of glass and the first part of said another layer, and ~~and migrates into said another of said layers and binds at least a portion of said first part of said another of said layers to said one of said layers and to said sheet of glass within said print pattern, more strongly than the second part of said another of said layers binds to said sheet of glass outside said print pattern but does not migrate into said another of said layers or bind said another of said layers to said sheet of glass outside said print pattern,~~ and

(iii) removing at least a portion of the second parts of said another of said layers outside said print pattern.

29. (Previously Presented) The method of claim 1, wherein said subjecting of said sheet of glass and said plurality of layers to the heat treatment process does not cause said glass frit (a) to fuse with said sheet of glass outside said print pattern, or (b) bind said another of said layers outside said print pattern.

30. (Previously Presented) The method of claim 1, wherein, as viewed in a cross-section through the glass panel, the print pattern comprises alternate printed portions formed by said one of said layers comprising glass frit and unprinted portions devoid of said glass frit.

31. (Previously Presented) The method of claim 1, wherein removing the parts of said another of said layers outside said print pattern comprises removing all parts of said another of said layers outside said print pattern.

32. (Cancelled)

33. (Currently Amended) The method of claim 28, wherein said removing comprises removing the at least a portion of the second parts of said another of said layers outside said print pattern by (a) burning off during said heat treatment process, (b) vaporizing during said heat treatment process, or (c) a subsequent finishing process.

34. (Currently Amended) The method of claim 28, wherein said removing comprises removing the at least a portion of the second parts of said another of said layers outside said print pattern after the completion of said heat treatment process.

35. (Currently Amended) The method of claim 1, wherein:
~~said another of said layers comprises the pigment of the second part~~ that remains on the sheet of glass outside the print pattern until after the completion of the heat treatment process;
and
~~said removing removes said pigment of said another of said layers from said sheet of glass outside the print pattern.~~

36. (Currently Amended) A method of making a glass panel that is partially printed with a plurality of layers in the form of a print pattern which subdivides the panel into a plurality of discrete printed areas and/or a plurality of discrete unprinted areas, said method comprising, in sequence:

(i) applying a plurality of layers to a sheet of glass, wherein said applying comprises printing one of said layers comprising a ceramic ink comprising glass frit in the form of said print pattern, and wherein said applying comprises applying another of said layers comprising pigment both within and outside said print pattern,

(ii) subjecting said sheet of glass and said plurality of layers to a heat treatment process wherein said glass frit melts and fuses with said sheet of glass and binds said pigment within the print pattern to said sheet of glass within the print pattern more strongly than said pigment outside the print pattern binds to said sheet outside the print pattern, and

(iii) removing said pigment outside said print pattern from said sheet of glass.

37. (Previously Presented) The method of claim 36, wherein, as viewed in a cross-section through the glass panel, the print pattern comprises alternate printed portions formed by said one of said layers comprising glass frit and unprinted portions devoid of said glass frit.

38. (Previously Presented) The method of claim 36, wherein said another of said layers does not comprise glass frit.

39. (Previously Presented) The method of claim 36, wherein said printing of said one of said layers comprises printing the one of said layers in the form of said print pattern onto the sheet of glass.

40. (Currently Amended) The method of claim 36, wherein said printing of said one of said layers comprises printing the one of said layers in the form of said print pattern onto a decal carrier material and transferring said one of said layers in the form of a decal from said decal carrier material onto said sheet of glass.

41. (New) The method of claim 28, wherein said subjecting of said sheet of glass and said plurality of layers to the heat treatment process causes (a) said glass frit to melt, fuse with said sheet of glass, migrate into the first part of said another of said layers, and bind at least a

portion of said first part of said another of said layers to said one of said layers and to said sheet of glass within said print pattern, and (b) said glass frit not to migrate into said second part of said another of said layers outside said print pattern or bind said second part of said another of said layers to said sheet of glass outside said print pattern.